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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,922	04/25/2001	Jeremy S. Cooper	2018.0070001	6528

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EXAMINER

TO, BAOQUOC N

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 12/22/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

TS

Office Action Summary

Application No.

09/840,922

Applicant(s)

COOPER, JEREMY S.

Examiner

Baoquoc N To

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

1. Claims 1-31 are pending in this application.
2. After reviewing the applicant remarks filed on 09/24/03, the office withdrawn the office action dated on 07/29/03.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US. Patent No. 6,223,520).

Regarding on claims 1, 15 and 27, Ito teaches a method of performing a proximity search, comprising the steps of:

(a) receiving a proximity parameter defining a search area encompassing a predetermined position (a form of the request is such that a range of the map data is designated as a rectangular range in latitude and longitude) (col. 4, lines 60-61; and

(c) comparing (compare before retrieve) the set of latitudes and longitudes to position field information in a plurality of records stored in a database (only the map data which exist within a rectangular range are read out and output) (col. 5, lines 25-27).

Ito does not explicitly teach (b) calculating a set of latitudes and longitudes approximating the search area based on the proximity parameter. However, Ito teaches, "when a user of the navigation system requests position computation, the

navigation function section 12 outputs a request for map data to be used for the position computation to the data access section 14. The position computation is specifically that after the assessment of a location of vehicle detected by a GPS or the like, superimposed displays of the location of vehicle perform. To designate, for example coordinates at the bottom left-hand corner (latitude and longitude) and at the top right-hand corner (latitude and longitude) of a rectangular range similarity to the first embodiment is one of the forms of the requests made by the navigation section 12 to data access section" (col. 6, lines 59-65 and col. 7, lines 1-3). This teaches calculating the latitudes and longitudes position of the car in order to retrieve the display map. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to include calculating the latitudes and longitudes position in order to retrieve the map to determine the location of the user in order to request the destination of the reference to the current location.

Regarding on claims 2, 16 and 28, Ito teaches determining which of the plurality of records include position information within the search area base on step (c) (col. 5, lines 25-30).

Regarding on claims 3, 17 and 29, Ito teaches the proximity parameter is a search radius defining a circular search area center around the predetermined position, and wherein step (b) further comprises the step of calculating the set of latitudes and longitudes to define a smallest square search area into which the circular search area can fit (col. 6, lines 59-65).

Regarding on claims 4, 18 and 30, Ito teaches the position information in each of the plurality of records includes a latitude and a longitude associated with a position (col. 6, lines 59-65), and

Wherein the smallest square search area covers a latitude range and a longitude range corresponding respectively to a height and a width of the square each corresponding to a distance equal to at least twice the proximity parameter (col. 6, 59-65), and

Wherein step (c) comprises respectively comparing the latitude and longitude associated with each of the plurality of records to the latitude and longitude ranges covered by the smallest square search area to determine which of the plurality of records include position information within the square search area (col. 9, lines 59-65).

Regarding on claims 5, 19 and 31, Ito teaches calculating (calculating) respective latitudes and longitudes of a least first, second, and third corner of the square area, wherein the latitude range extends between the latitude of the first and second corners and the longitude range extends between the longitudes of the second and third corners of the square area (calculating position including the longitude and longitude) (col. 6, lines 59-65).

Regarding in claims 6 and 20, Ito teaches calculating (calculating position) latitudes and longitudes of at least the first, second, and third corners of the square area, wherein the first, second, and third corners of the square area, wherein the first and second corner are at the same longitude but different latitudes and the second and third corners are at the same latitude but different longitudes (col. 6, lines 59-65).

Regarding in claims 7 and 21, Ito teaches calculating an angular width of the square area, the angular width being subtended by at least the width of the square area (col. 6, lines 59-65); and

Calculating an angular height of the square area, the angular height being subtended by at least the height of the square area (col. 6, lines 59-65).

Regarding on claims 8 and 22, Ito teaches predetermined position has a latitude and a longitude, and wherein the step (b) further comprises the steps of:

Calculating (calculating) respective latitudes for the first, second and third corners using the predetermined position latitude and the angular height of the square area (col. 6, lines 59-65); and

Calculating (calculating) respective longitudes for the first, second and third corner using the predetermined position longitude and the angular width of the square area (col. 6, lines 59-65).

Regarding on claims 9 and 23, Ito teaches step (a) comprises the step of receiving an information request associated with the predetermined position and the proximity parameter (user location is predetermined location) (col. 9, lines 59-65).

Regarding on claims 10 and 24, Ito teaches (e) sending a search result (data map) based on the records associated with position information determined to be within the square area at step (c), to fulfill the information request (col. 6, lines 59-60).

Regarding on claims 11 and 25, Ito teaches step (b) further comprises calculating the circular and the square search areas using non-planar geometry (col. 6, lines 59-63).

Regarding on claims 12 and 26, Ito teaches step (b) further comprises calculating the circular and the square search areas using planer geometry (col. 6, lines 59-63).

Regarding on claim 13, Ito teaches a method of performing a proximity search, comprising the steps of:

(a) receiving a proximity parameter (user location including longitude and longitudes) defining a first search area encompassing a predetermined position (user location) (col. 6, lines 28-39);

(b) mapping the first search area to a second search area positioned to encompass the first search area based on the proximity parameter and being defined in terms of a set of latitudes and longitudes (col. 9, lines 55-59) ; and

comparing (compare before outputting) the set of latitudes and longitudes to position information in a plurality of records stored in a database to determine which of the plurality of records include position information within the second search area (outputting a request map data) (col. 6, lines 59-62).

Ito does not explicitly teach mapping the first search area to second search area positioned to encompass the first search area. However, Ito teaches, "a range of the map data to be read out by the data access section 14 for the data section 22. In the drawing, the area 1, 2...are area segments of the map data recorded in the data section 22 of the recording medium 20 and are also segments which rely on a recording format of the recording medium 20. Further, if a point A and point B are locations which corresponding to latitude and longitude designated by the navigational function section 12, a rectangular rang of the map data request by the navigation function section 12 is a

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range shown by a numeral 100" (col. 5, lines 16-27). This teaches Ito employs mapping in order to retrieve the data map based on the request locations of A and B. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to employing mapping utility in order to retrieve the information from the database based on the requested information.

Regarding on claim 14, Ito teaches the proximity parameter (longitude and longitudes of the user location) is a search radius defining a circular search area centered around the predetermined position, and wherein step (b) comprises mapping the circular search area to a smallest square search area into which the circular search area can fit (col. 9, lines 59-65).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Monden (US. Patent No. 6,094,507) Date: 07/25/2000

Bruce et al. (US. Patent No. 6,539,080 B1) Date: 03/25/2003

Goldensher et al. (US. Patent No. 6,282,540) Date: 08/28/2001

Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is (703) 305-1949 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached at (703) 305-4393.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

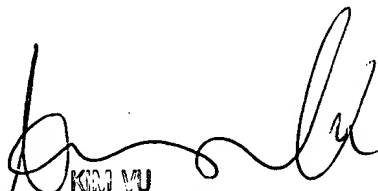
- (703) 746-7239 [Official Communication]

Hand-delivered responses should be brought to:

Crystal Park II
2121 Crystal Drive
Arlington, VA 22202
Fourth Floor (Receptionist).

Baoquoc N. To

Dec 13, 2003


KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100